```
Welcome to STN International!  Enter x:x
LOGINID:ssspta1617mxb
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Sep 17  IMSworld Pharmaceutical Company Directory name change
                  to PHARMASEARCH
 NEWS  3  Oct 09  Korean abstracts now included in Derwent World Patents
                  Index
 NEWS  4  Oct 09  Number of Derwent World Patents Index updates increased
 NEWS  5  Oct 15  Calculated properties now in the REGISTRY/ZREGISTRY File
 NEWS  6  Oct 22  Over 1 million reactions added to CASREACT
 NEWS  7  Oct 22  DGENE GETSIM has been improved
 NEWS  8  Oct 29  AAASD no longer available
 NEWS  9  Nov 19  New Search Capabilities  USPATFULL and USPAT2
 NEWS 10  Nov 19  TOXCENTER(SM) - new toxicology file now available on STN
 NEWS 11  Nov 29  COPPERLIT now available on STN
 NEWS 12  Nov 29  DWPI revisions to NTIS and US Provisional Numbers
 NEWS 13  Nov 30  Files VETU and VETB to have open access
 NEWS 14  Dec 10  WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
 NEWS 15  Dec 10  DGENE BLAST Homology Search
 NEWS 16  Dec 17  WELDASEARCH now available on STN
 NEWS 17  Dec 17  STANDARDS now available on STN
 NEWS 18  Dec 17  New fields for DPCI
 NEWS 19  Dec 19  CAS Roles modified
 NEWS 20  Dec 19  1907-1946 data and page images added to CA and CAplus
 NEWS 21  Jan 25  BLAST(R) searching in REGISTRY available in STN on the Web
 NEWS 22  Jan 25  Searching with the P indicator for Preparations
 NEWS 23  Jan 29  FSTA has been reloaded and moves to weekly updates
 NEWS 24  Feb 01  DKILIT now produced by FIZ Karlsruhe and has a new update
                  frequency

 NEWS EXPRESS  February 1 CURRENT WINDOWS VERSION IS V6.0d,
               CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:57:56 ON 15 FEB 2002

=> file registry
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
```

	ENTRY	SESSION
FULL ESTIMATED COST	0.15	0.15

FILE 'REGISTRY' ENTERED AT 16:58:04 ON 15 FEB 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 14 FEB 2002 HIGHEST RN 392654-43-2
DICTIONARY FILE UPDATES: 14 FEB 2002 HIGHEST RN 392654-43-2

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

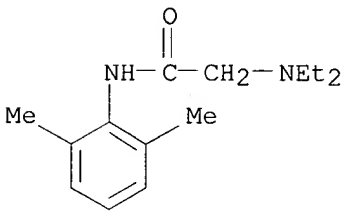
Customers running searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.

```
=> s lidocaine/cn
L1            1 LIDOCAINE/CN

=> d

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   137-58-6  REGISTRY
CN   Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)- (9CI)  (CA INDEX
NAME)
OTHER CA INDEX NAMES:
CN   2',6'-Acetoxylidide, 2-(diethylamino)- (8CI)
OTHER NAMES:
CN   .alpha.-Diethylamino-2,6-acetoxylidide
CN   2-(Diethylamino)-2',6'-acetoxylidide
CN   2-(Diethylamino)-N-(2,6-dimethylphenyl)acetamide
CN   Anbesol
CN   Anestacon
CN   Duncaine
CN   Isicaina
CN   Isicaine
CN   Jetocaine
CN   Leostesin
```

CN **Lidocaine**
CN Lignocaine
CN Maricaine
CN Medicaine
CN Remicaine
CN Rucaina
CN Solcain
CN Xilina
CN Xycaine
CN Xylestesin
CN Xyline
CN Xylocain
CN Xylocaine
CN Xylocitin
FS 3D CONCORD
DR 8059-42-5, 8059-66-3, 91484-71-8
MF C14 H22 N2 O
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TOXLIT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6147 REFERENCES IN FILE CA (1967 TO DATE)
68 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6156 REFERENCES IN FILE CAPLUS (1967 TO DATE)
31 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

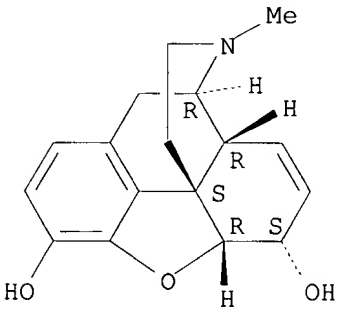
=> s morphine/cn
L2 1 MORPHINE/CN

=> d

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 57-27-2 REGISTRY
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-
(5.alpha.,6.alpha.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Morphinan-3,6.alpha.-diol, 7,8-didehydro-4,5.alpha.-epoxy-17-methyl-
(8CI)

OTHER NAMES:
CN (-)-Morphine
CN Duromorph
CN l-Morphine
CN Meconium
CN Morphia
CN Morphin
CN Morphina
CN **Morphine**
CN Morphinism
CN Morphinum
CN Morphium
CN Moscontin
CN Ospalivina
FS STEREOSEARCH
DR 8053-16-5, 85201-37-2, 47106-99-0
MF C17 H19 N O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA,
PROMT, RTECS*, SPECINFO, TOXCENTER, TOXLIT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

17619 REFERENCES IN FILE CA (1967 TO DATE)
229 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
17630 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> file embase biosis medline embase uspatfull

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	11.48	11.63

FILE 'EMBASE' ENTERED AT 16:58:46 ON 15 FEB 2002

FILE 'BIOSIS' ENTERED AT 16:58:46 ON 15 FEB 2002

FILE 'MEDLINE' ENTERED AT 16:58:46 ON 15 FEB 2002

FILE 'USPATFULL' ENTERED AT 16:58:46 ON 15 FEB 2002

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.29	14.92

FILE 'CAPLUS' ENTERED AT 16:58:52 ON 15 FEB 2002

FILE COVERS 1907 - 15 Feb 2002 VOL 136 ISS 8
FILE LAST UPDATED: 14 Feb 2002 (20020214/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

```
=> s lidocaine or  137-58-6/rn
          7758 LIDOCAINE
             6 LIDOCAINES
          7758 LIDOCAINE
                 (LIDOCAINE OR LIDOCAINES)
          6181 137-58-6
            68 137-58-6D
          6143 137-58-6/RN
                 (137-58-6 (NOTL) 137-58-6D )
L3        8957 LIDOCAINE OR  137-58-6/RN
```

```
=> s morphine or 57-27-2/rn
         34678 MORPHINE
           166 MORPHINES
         34725 MORPHINE
                 (MORPHINE OR MORPHINES)
         17796 57-27-2
           230 57-27-2D
         17667 57-27-2/RN
                 (57-27-2 (NOTL) 57-27-2D )
L4       35445 MORPHINE OR 57-27-2/RN

=> s l3 and l4
L5         416 L3 AND L4

=> s topical analgesic
         29361 TOPICAL
            30 TOPICALS
         29376 TOPICAL
                 (TOPICAL OR TOPICALS)
         32660 ANALGESIC
         27203 ANALGESICS
         40072 ANALGESIC
                 (ANALGESIC OR ANALGESICS)
L6         110 TOPICAL ANALGESIC
                 (TOPICAL(W)ANALGESIC)

=> s l5 and l6
L7           1 L5 AND L6

=> d l7

L7   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2002 ACS
AN   2000:779733  CAPLUS
DN   134:66082
TI   Analgesic synergy between topical lidocaine and topical opioids
AU   Kolesnikov, Yuri A.; Chereshnev, Igor; Pasternak, Gavril W.
CS   The Department of Anesthesiology, Memorial Sloan-Kettering Cancer Center,
     New York, NY, USA
SO   J. Pharmacol. Exp. Ther. (2000), 295(2), 546-551
     CODEN: JPETAB; ISSN: 0022-3565
PB   American Society for Pharmacology and Experimental Therapeutics
DT   Journal
LA   English
RE.CNT  32    THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> s l5 and topical
         29361 TOPICAL
            30 TOPICALS
         29376 TOPICAL
                 (TOPICAL OR TOPICALS)
L8          19 L5 AND TOPICAL

=> s l8 and py<2000
      19714796 PY<2000
L9          12 L8 AND PY<2000

=> dup rem l9
PROCESSING COMPLETED FOR L9
```

L10 12 DUP REM L9 (0 DUPLICATES REMOVED)

=> d l10 ab bib kwic

L10 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS

AB Methods and app. for improving dermal and mucosal administration of drugs through the use of controlled heat and other phys. means, i.e., ultrasound, microwave, elec. current, and vibrations, are described. The controlled heat and other phys. means are used to alter, mainly increase, the drug release rate from dermal drug delivery systems (DDDSs), conventional com. DDDSs, or drugs delivered into a sub-skin depot site via injection and other methods. For example, with heating by the temp. control app., it was found that fentanyl entered the systemic circulation of human volunteers earlier and at faster rate from a com. available dermal patch, Duragesic 50 (designed to deliver an av. of 50 g fentanyl/h), compared to the unheated patch. At 240 min, the end of the heating and fentanyl patch application, the av. serum concns. of fentanyl was about 5 times that of the unheated patch. These results demonstrates that controlled heat can significantly increase the speed of dermal fentanyl absorption and shorten the onset time. It is believed that the increased temp. increases the skin permeability resulting in the drug entering the patient's systemic circulation faster.

AN 2001:423696 CAPLUS
DN 135:37181

TI Methods and temperature control apparatus for improved administration of pharmaceutically active compounds including hormones

IN Zhang, Jie; Zhang, Hao
PA Zars, Inc., USA

SO U.S., 37 pp., Cont.-in-part of U.S. 5,919,479.
CODEN: USXXAM
DT Patent
LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6245347	B1	20010612	US 1998-162890	19980929	
	US 5658583	A	19970819	US 1995-508463	19950728	<--
	WO 2000018339	A1	20000406	WO 1999-US22698	19990929	
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
	AU 9964062	A1	20000417	AU 1999-64062	19990929	
	EP 1117357	A1	20010725	EP 1999-951669	19990929	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
	US 6303142	B1	20011016	US 2000-545591	20000407	
	US 6306431	B1	20011023	US 2000-545497	20000407	
	US 6340472	B1	20020122	US 2000-545495	20000407	
	US 2001037104	A1	20011101	US 2001-796250	20010228	
PRAI	US 1995-508463	A3	19950728			
	US 1997-819880	A2	19970318			
	US 1998-162890	A	19980929			
	US 1999-317313	A	19990524			

US 1999-317372 A 19990524
WO 1999-US22698 W 19990929
US 2000-185913 P 20000229
US 2000-545591 A2 20000407
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6245347	B1	20010612	US 1998-162890	19980929	
	US 5658583	A	19970819	US 1995-508463	19950728	<--
	WO 2000018339	A1	20000406	WO 1999-US22698	19990929	

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	AU 9964062	A1	20000417	AU 1999-64062	19990929
	EP 1117357	A1	20010725	EP 1999-951669	19990929

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

	US 6303142	B1	20011016	US 2000-545591	20000407
	US 6306431	B1	20011023	US 2000-545497	20000407
	US 6340472	B1	20020122	US 2000-545495	20000407
	US 2001037104	A1	20011101	US 2001-796250	20010228

IT Drug delivery systems
(**topical**, mucosal; controlled heat and other phys. means for improved dermal and mucosal drug delivery)
IT 50-02-2, Dexamethasone 50-28-2, Estradiol, biological studies 50-81-7,
Vitamin C, biological studies 51-55-8, Atropine, biological studies 54-11-5, Nicotine 55-63-0, Nitroglycerin **57-27-2**, **Morphine**, biological studies 57-42-1, Meperidine 57-83-0, Progesterone, biological studies 58-20-8, Testosterone cypionate 58-22-0, Androderm 94-24-6, Tetracaine 113-15-5, Ergotamine **137-58-6**, **Lidocaine** 315-37-7, Testosterone enanthate 511-12-6, Dihydroergotamine 721-50-6, Prilocaine 1406-18-4, Vitamin E 4205-90-7, Clonidine 9002-89-5, Polyvinyl alcohol 9004-10-8, Insulin, biological studies 11103-57-4, Vitamin A 26780-50-7, Medisorb 8515DL 34346-01-5, Atrigel 38396-39-3, Bupivacaine 56030-54-7, Sufentanil 71195-58-9, Alfentanil 103628-46-2, Sumatriptan 131723-69-8, Smart Hydrogel 132875-61-7, Remifentanil 139264-17-8, Zolmitriptan 144034-80-0, Rizatriptan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled heat and other phys. means for improved dermal and mucosal drug delivery)

=> d l10 2-12 ab bib kwic

L10 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS
AB A method for enhancing the analgesic efficacy of opioids and local anesthetics that act on peripheral sensory nerves in tissues, and preferably in non-inflamed tissue, in a subject in need of such treatment,
is based on administration of a therapeutically effective amt. of an opioid, opioid peptide (derivs. of naturally occurring endorphins), a

local anesthetic or mixts. thereof in combination with a hyperosmolar soln. having an osmolality of > 300 mOsm/L and optionally other pharmaceutically acceptable carriers and diluents. The method is applicable in a large variety of painful conditions, such as injury of the skin (burns, radiation, cuts, psoriasis, surgery, infections, etc.), cancer, musculocutaneous and myofascial pain syndromes, causalgia, shingles, postherpetic neuralgia, headache, and gastrointestinal, facial, urol., abdominal gynecol. or postoperative pain. The advantage of the method is pain relief by using extremely small doses of the active agent in combination with hyperosmolar solns. and thereby foregoing all the untoward systemic side effects of opiates or local anesthetics. The antinociceptive effects in noninflamed and inflamed rat paws after concomitant injection of hyperosmolar soln. of mannitol (1M) with three opioid agonists, DAGO and DPDPE (0.004 mg) or U-50488H (0.04 mg) were examd. All three opioid agonists, in combination with mannitol, produced elevations in paw pressure threshold in noninflamed paws that were comparable to those of inflamed paws at 12 h and 4 days after inoculation.
The addn. of mannitol to opioids did not alter their antinociceptive effects in inflamed paws.

AN 1999:571725 CAPLUS
DN 131:194297
TI Method of enhancing the analgesic efficacy of locally and topically administered opioids and other local anesthetics
IN Stein, Christoph
PA El Khoury & Stein, Ltd., USA
SO U.S., 11 pp., Cont. of U.S. Ser. No. 488,021, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5948389	A	19990907	US 1997-922573	19970903 <--
PRAI US 1995-488021		19950607		

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

PI US 5948389 A **19990907**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5948389	A	19990907	US 1997-922573	19970903 <--

IT Drug delivery systems
(**topical**; hyperosmolar solns. for enhancing analgesic efficacy of locally and topically administered opioids and local anesthetics)
IT **57-27-2**, biological studies 57-42-1, Meperidine 69-65-8, D-Mannitol 94-24-6, Pontocaine 103-81-1, Benzeneacetamide **137-58-6**, **Lidocaine** 721-50-6, Prilocaine 990-73-8, Fentanyl citrate 3572-80-3, Cyclazocine 36637-18-0, Etidocaine 38396-39-3, Bupivacaine 74135-04-9, Morphiceptin 78123-71-4, DAGO 83386-35-0, Tifluadom 83913-06-8, U 50488H 88373-73-3
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hyperosmolar solns. for enhancing analgesic efficacy of locally and topically administered opioids and local anesthetics)

L10 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
AB We prospectively studied **topical lidocaine**-prilocaine cream (EMLA) vs. IV **morphine** in a double-blinded, randomized

fashion for pain relief during thoracostomy tube (chest tube; CT) removal.

Adult patients who had undergone thoracotomy or median sternotomy were randomized to receive either EMLA cream over CT sites transdermally for 3 h or IV **morphine** 0.5 h before CT removal. Pain behavior was obsd. and rated before, during, and after CT removal. Pain behavior increased less in the **topical** EMLA group (mean .+-. SE, 4.4.+-.0.39) compared with the IV **morphine** group (6.0.+-.0.38; P < 0.01). No signs of infection were noted at the CT sites 24 or 48 h after CT removal. We conclude that EMLA cream is more effective than IV **morphine** in preventing the pain assocd. with CT removal. Implications: Postoperatively applying a **topical** anesthetic cream onto chest tube sites of chest surgery patients 3 h before chest tube removal is more effective than IV **morphine** in blunting pain response.

AN 1999:319708 CAPLUS
DN 130:347345
TI **Topical lidocaine**-prilocaine cream (EMLA) for thoracostomy tube removal
AU Valenzuela, Roberto C.; Rosen, David A.
CS Department of Anesthesiology, West Virginia University, Morgantown, WV, 26506-9134, USA
SO Anesth. Analg. (Baltimore) (**1999**), 88(5), 1107-1108
CODEN: AACRAT; ISSN: 0003-2999
PB Lippincott Williams & Wilkins
DT Journal
LA English
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI **Topical lidocaine**-prilocaine cream (EMLA) for thoracostomy tube removal
SO Anesth. Analg. (Baltimore) (**1999**), 88(5), 1107-1108
CODEN: AACRAT; ISSN: 0003-2999
AB We prospectively studied **topical lidocaine**-prilocaine cream (EMLA) vs. IV **morphine** in a double-blinded, randomized fashion for pain relief during thoracostomy tube (chest tube; CT) removal.

Adult patients who had undergone thoracotomy or median sternotomy were randomized to receive either EMLA cream over CT sites transdermally for 3 h or IV **morphine** 0.5 h before CT removal. Pain behavior was obsd. and rated before, during, and after CT removal. Pain behavior increased less in the **topical** EMLA group (mean .+-. SE, 4.4.+-.0.39) compared with the IV **morphine** group (6.0.+-.0.38; P < 0.01). No signs of infection were noted at the CT sites 24 or 48 h after CT removal. We conclude that EMLA cream is more effective than IV **morphine** in preventing the pain assocd. with CT removal. Implications: Postoperatively applying a **topical** anesthetic cream onto chest tube sites of chest surgery patients 3 h before chest tube removal is more effective than IV **morphine** in blunting pain response.
ST **lidocaine** prilocaine cream anesthetic analgesic thoracostomy
IT **Topical** drug delivery systems
(anesthetics; **topical lidocaine**-prilocaine cream (EMLA) vs. i.m. **morphine** effect on thoracostomy tube removal in humans)
IT Surgery
(thoracostomy tube; **topical lidocaine**-prilocaine cream (EMLA) vs. i.m. **morphine** effect on thoracostomy tube removal in humans)
IT Analgesics

(**topical lidocaine**-prilocaine cream (EMLA) vs. i.m. **morphine** effect on thoracostomy tube removal in humans)

IT Anesthetics
(**topical**; **topical lidocaine**-prilocaine cream (EMLA) vs. i.m. **morphine** effect on thoracostomy tube removal in humans)

IT **137-58-6, Lidocaine** 721-50-6, Prilocaine
101362-25-8, EMLA
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**topical lidocaine**-prilocaine cream (EMLA) vs. i.m. **morphine** effect on thoracostomy tube removal in humans)

L10 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS

AB A pharmaceutical compn. contains an acid addn. salt of a basic drug and a fatty acid or bile acid. The acid addn. salts thus formed exhibit enhanced transmucosal and transdermal penetration of the basic drug. The acid addn. salts, an inclusion complex contg. said salts and a use of said salts are also disclosed. Thus, 10.01 g capric acid was added to a soln. of 13.91 g salbutamol base in 600 mL ethanol and stirred until all solid material was dissolved. Evapn. of the solvent gave a pale yellow oil to which 300 mL warm Et acetate was added and stored at 5.degree. for 36 h resulting in the pptn. of a fine white solid which was sepd. and purified to obtain salbutamol caprate. A sublingual table contained salbutamol caprate .gamma.-cyclodextrin complex (prepn. given) 32, lactose 20, and magnesium stearate 1 mg.

AN 1998:66112 CAPLUS
DN 128:145353
TI Pharmaceutical composition containing acid addition salt of basic drug
IN Penkler, Lawrence John; De Kock, Lueta-Ann; Whittaker, Darryl Vanstone
PA Farmarc Nederland B.V., Neth.; Dyer, Alison Margaret; Penkler, Lawrence John; De Kock, Lueta-Ann; Whittaker, Darryl Vanstone
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI WO 9802187	A1	19980122	WO 1997-GB1873	19970711	<--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
CA 2257860	AA	19980122	CA 1997-2257860	19970711	<--
CA 2259418	AA	19980122	CA 1997-2259418	19970711	<--
ZA 9706178	A	19980203	ZA 1997-6178	19970711	<--
ZA 9706179	A	19980203	ZA 1997-6179	19970711	<--
AU 9734552	A1	19980209	AU 1997-34552	19970711	<--
CN 1225018	A	19990804	CN 1997-196294	19970711	<--
BR 9710289	A	19990817	BR 1997-10289	19970711	<--
CN 1230123	A	19990929	CN 1997-197767	19970711	<--
EP 1024833	A1	20000809	EP 1997-930681	19970711	
R: AT, BE, DE, ES, FR, GB, IT					
JP 2001508027	T2	20010619	JP 1998-505726	19970711	

KR 2000022239 A 20000425 KR 1998-710659 19981226
KR 2000023708 A 20000425 KR 1999-700167 19990111
US 6255502 B1 20010703 US 1999-225470 19990419
PRAI ZA 1996-5889 A 19960711
WO 1997-GB1873 W 19970711
PI WO 9802187 A1 **19980122**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI WO 9802187	A1	19980122	WO 1997-GB1873	19970711	<--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2257860	AA	19980122	CA 1997-2257860	19970711	<--
CA 2259418	AA	19980122	CA 1997-2259418	19970711	<--
ZA 9706178	A	19980203	ZA 1997-6178	19970711	<--
ZA 9706179	A	19980203	ZA 1997-6179	19970711	<--
AU 9734552	A1	19980209	AU 1997-34552	19970711	<--
CN 1225018	A	19990804	CN 1997-196294	19970711	<--
BR 9710289	A	19990817	BR 1997-10289	19970711	<--
CN 1230123	A	19990929	CN 1997-197767	19970711	<--
EP 1024833	A1	20000809	EP 1997-930681	19970711	

R: AT, BE, DE, ES, FR, GB, IT

JP 2001508027	T2	20010619	JP 1998-505726	19970711	
KR 2000022239	A	20000425	KR 1998-710659	19981226	
KR 2000023708	A	20000425	KR 1999-700167	19990111	
US 6255502	B1	20010703	US 1999-225470	19990419	

IT Suppositories (drug delivery systems)
Tablets (drug delivery systems)
Topical gels (drug delivery systems)
Transdermal drug delivery systems
(pharmaceutical compn. contg. acid addn. salt of basic drug)
IT 52-53-9, Verapamil **57-27-2**, **Morphine**, biological studies 59-46-1, Procaine 82-92-8, Cyclizine **137-58-6**, **Lidocaine** 364-62-5, Metoclopramide 437-38-7, Fentanyl 915-30-0, Diphenoxylate 7585-39-9D, .beta.-Cyclodextrin, hydroxypropyl derivs. 12619-70-4, Cyclodextrin 12619-70-4D, Cyclodextrin, complexes 13392-18-2, Fenoterol 17465-86-0, .gamma.-Cyclodextrin 23031-25-6, Terbutaline 38396-39-3, Bupivacaine 53179-11-6, Loperamide 55985-32-5, Nicardipine 62571-86-2, Captopril 74913-18-1, Dynorphin 75847-73-3, Enalapril 87333-19-5, Ramipril 89365-50-4, Salmeterol 103628-46-2, Sumatriptan 121679-13-8, Naratriptan 139264-17-8, Zolmitriptan 144034-80-0, Rizatriptan 202282-68-6 202282-69-7 202282-70-0 202282-71-1 202282-74-4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compn. contg. acid addn. salt of basic drug)

L10 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
AB 4-Decyl-2-oxazolidinone (SR 38) formulated in transdermal delivery system contg. lipophilic and hydrophilic drugs enhanced the drug permeation through the human stratum corneum. In addn., the enhanced the drug permeation from **topical** formulations. There was no skin sensitization or irritation.
AN 1997:463797 CAPLUS
DN 127:113267
TI Oxazolidinones: a new class of cyclic urethane transdermal enhancer (CUTE)

AU Pfister, William R.; Rajadhyaksha, Vithal J.
CS Pharmaceutical Research and Development, Pharmetrix Div. of TCPI, Menlo Park, CA, 94025, USA
SO Proc. Int. Symp. Controlled Release Bioact. Mater. (**1997**), 24th, 709-710
CODEN: PCRMEY; ISSN: 1022-0178
PB Controlled Release Society, Inc.
DT Journal
LA English
SO Proc. Int. Symp. Controlled Release Bioact. Mater. (**1997**), 24th, 709-710
CODEN: PCRMEY; ISSN: 1022-0178
AB 4-Decyl-2-oxazolidinone (SR 38) formulated in transdermal delivery system contg. lipophilic and hydrophilic drugs enhanced the drug permeation through the human stratum corneum. In addn., the enhanced the drug permeation from **topical** formulations. There was no skin sensitization or irritation.
ST oxazolidinone SR 38 transdermal drug enhancer; **topical** drug enhancer SR 38
IT Permeation (biological)
Skin
Topical drug delivery systems
Transdermal drug delivery systems
(oxazolidinone as cyclic urethane transdermal enhancer)
IT 50-23-7, Hydrocortisone 53-86-1, Indomethacin 57-83-0, Progesterone, biological studies 64-31-3, **Morphine** sulfate 87-33-2, Isosorbide dinitrate **137-58-6, Lidocaine** 721-50-6, Prilocaine 15307-86-5, Diclofenac 21829-25-4, Nifedipine 28981-97-7, Alprazolam 33286-22-5, Diltiazem hydrochloride 38304-91-5, Minoxidil
RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oxazolidinone as cyclic urethane transdermal enhancer)

L10 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
AB A review with many refs. identifying and analyzing the controlled clin. trial data for peripheral neuropathic pain (PNP) and complex regional pain syndromes (CRPS). A total of 72 articles were found, which included 92 controlled drug trials using 48 different treatments. The methods of these studies were critically reviewed and the results summarized and compared. The PNP trial literature gave consistent support (two or more trials) for the analgesic effectiveness of tricyclic antidepressants, i.v. and **topical lidocaine**, i.v. ketamine, carbamazepine and **topical** aspirin. There was limited support (one trial) for the analgesic effectiveness of oral, **topical** and epidural clonidine and for s.c. ketamine. The trial data were contradictory for mexiletine, phenytoin, **topical** capsaicin, oral non-steroidal anti-inflammatory medication, and i.v. **morphine**. Anal. of the trial methods indicated that mexiletine and i.v. **morphine** were probably effective analgesics for PNP, while non-steroidal agents were probably ineffective. Codeine, magnesium chloride, propranolol, lorazepam, and i.v. phentolamine all failed to provide analgesia in single trials. There were no long-term data supporting the analgesic effectiveness of any drug and the etiol. of the neuropathy did not predict treatment outcome. Review of the controlled trial literature for CRPS identified several potential problems with current clin. practices. The

trial data only gave consistent support for analgesia with corticosteroids, which had long-term effectiveness. There was limited support for the analgesic effectiveness of **topical** dimethylsulfoxide (DMSO), epidural clonidine and i.v. regional blocks (IVRBs) with bretylium and ketanserin. The trial data were contradictory for intranasal calcitonin and i.v. phentolamine and anal. of the trial methods indicated that both treatments were probably ineffective for most patients. There were consistent trial data indicating that guanethidine and reserpine IVRBs were ineffective, and limited trial data indicating that droperidol and atropine IVRBs were ineffective. No placebo controlled data were available to evaluated sympathetic ganglion blocks (SGBs) with local anesthetics, surgical sympathectomy, or phys. therapy. Only the capsaicin trials presented data which allowed for meta-anal. This meta-anal. demonstrated a significant capsaicin effect with a pooled odds ratio of 2.35 (95 confidence intervals 1.48, 3.22). The methods scores were higher for the PNP trials (66.2) than the CRPS trials (57.6). The CRPS trials tended to use less subjects and were less likely to use placebo controls, double-blinding, or perform statistical tests for differences in outcome measures between groups. There was almost no overlap in the controlled trial literature between treatments for PNP and CRPS, and treatments used in both conditions (i.v. phentolamine and epidural clonidine) had similar results.

AN 1997:723920 CAPLUS

DN 128:123374

TI A critical review of controlled clinical trials for peripheral neuropathic pain and complex regional pain syndromes

AU Kingery, Wade S.

CS Miranda Ave., Physical Medicine and Rehabilitation Service (117), Veterans Affairs Palo Alto Health Care System, Palo Alto, CA 94304, 3801, USA

SO Pain (**1997**), 73(2), 123-139
CODEN: PAINDB; ISSN: 0304-3959

PB Elsevier

DT Journal; General Review

LA English

SO Pain (**1997**), 73(2), 123-139
CODEN: PAINDB; ISSN: 0304-3959

AB A review with many refs. identifying and analyzing the controlled clin. trial data for peripheral neuropathic pain (PNP) and complex regional pain syndromes (CRPS). A total of 72 articles were found, which included 92 controlled drug trials using 48 different treatments. The methods of these studies were critically reviewed and the results summarized and compared. The PNP trial literature gave consistent support (two or more trials) for the analgesic effectiveness of tricyclic antidepressants, i.v. and **topical lidocaine**, i.v. ketamine, carbamazepine and **topical** aspirin. There was limited support (one trial) for the analgesic effectiveness of oral, **topical** and epidural clonidine and for s.c. ketamine. The trial data were contradictory for mexiletine, phenytoin, **topical** capsaicin, oral non-steroidal anti-inflammatory medication, and i.v. **morphine**. Anal. of the trial methods indicated that mexiletine and i.v. **morphine** were probably effective analgesics for PNP, while non-steroidal agents were probably ineffective. Codeine, magnesium chloride, propranolol, lorazepam, and i.v. phentolamine all failed to provide analgesia in single trials. There were no long-term data supporting the analgesic effectiveness of any drug and the etiol. of the neuropathy did not predict

treatment outcome. Review of the controlled trial literature for CRPS identified several potential problems with current clin. practices. The trial data only gave consistent support for analgesia with corticosteroids, which had long-term effectiveness. There was limited support for the analgesic effectiveness of **topical** dimethylsulfoxide (DMSO), epidural clonidine and i.v. regional blocks (IVRBs) with bretylium and ketanserin. The trial data were contradictory for intranasal calcitonin and i.v. phentolamine and anal. of the trial methods indicated that both treatments were probably ineffective for most patients. There were consistent trial data indicating that guanethidine and reserpine IVRBs were ineffective, and limited trial data indicating that droperidol and atropine IVRBs were ineffective. No placebo controlled data were available to evaluated sympathetic ganglion blocks (SGBs) with local anesthetics, surgical sympathectomy, or phys. therapy. Only the capsaicin trials presented data which allowed for meta-anal. This meta-anal. demonstrated a significant capsaicin effect with a pooled odds ratio of 2.35 (95 confidence intervals 1.48, 3.22). The methods scores were higher for the PNP trials (66.2) than the CRPS trials (57.6). The CRPS trials tended to use less subjects and were less likely to use placebo controls, double-blinding, or perform statistical tests for differences in outcome measures between groups. There was almost no overlap in the controlled trial literature between treatments for PNP and CRPS, and treatments used in both conditions (i.v. phentolamine and epidural clonidine) had similar results.

L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS

AB Unit doses of a drug in cream, emulsion, gel, suspension, or ointment form are placed in sep. compartments of a carrier for use in transdermal therapy. Thus, a blister pack contained 28 .apprx.1-mL numbered transparent compartments, of which compartments 1-14 each contained 3 mg 17.beta.-estradiol in 1 mL vehicle and compartments 15-28 each contained 3 mg 17.beta.-estradiol and 1 mg norethisterone acetate in 1 mL vehicle. The compartments had an air-tight seal of Al foil, which could be removed sep. for each compartment for daily application of a unit dose to the skin for treatment of postmenopausal symptoms.

AN 1994:144205 CAPLUS

DN 120:144205

TI Unit doses of a semisolid **topical** drug for transdermal therapy

IN Liedtke, Rainer K.

PA Germany

SO Ger. Offen., 4 pp.
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4223004	A1	19940120	DE 1992-4223004	19920713 <--
	EP 581057	A1	19940202	EP 1993-110690	19930705 <--
	EP 581057	B1	19981007		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE				
	AT 171868	E	19981015	AT 1993-110690	19930705 <--
	ES 2123595	T3	19990116	ES 1993-110690	19930705 <--
	JP 07275321	A2	19951024	JP 1993-172931	19930713 <--
	US 5686112	A	19971111	US 1995-569958	19951220 <--
PRAI	DE 1992-4223004		19920713		
	US 1993-82939		19930629		

TI Unit doses of a semisolid **topical** drug for transdermal therapy
PI DE 4223004 A1 **19940120**

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	DE 4223004	A1	19940120	DE 1992-4223004	19920713	<--
	EP 581057	A1	19940202	EP 1993-110690	19930705	<--
	EP 581057	B1	19981007			
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE					
	AT 171868	E	19981015	AT 1993-110690	19930705	<--
	ES 2123595	T3	19990116	ES 1993-110690	19930705	<--
	JP 07275321	A2	19951024	JP 1993-172931	19930713	<--
	US 5686112	A	19971111	US 1995-569958	19951220	<--

IT 50-56-6, Oxytocin, biological studies 54-11-5, Nicotine **57-27-2**, **Morphine**, biological studies 57-27-2D, **Morphine**, derivs. 96-88-8, Mepivacaine 136-47-0, Pantocaine **137-58-6**, **Lidocaine** 342-10-9, Kallidin 437-38-7, Fentanyl 721-50-6, Prilocaine 8011-61-8, Tyrocidine 9002-72-6, Growth hormone 9004-10-8, Insulin, biological studies 9007-12-9, Calcitonin 9011-97-6, Cholecystokinin 9034-40-6D, LHRH, analogs 9061-61-4, Nerve growth factor 11096-26-7, Erythropoietin 16679-58-6, Desmopressin 52485-79-7, Buprenorphine 85637-73-6, Atrial natriuretic factor 143011-72-7, G-CSF
RL: BIOL (Biological study)
(kit contg. semisolid transdermal unit doses of)

L10 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
AB The title gels have improved thermorheolog. properties and a gelling temp. interval of approx. 25-37.degree.; the gels comprise (1) 10-30 wt.% of block copolymers of .alpha.-hydro-.omega.-hydroxypoly(oxyethylene)/poly(oxypropylene)/poly(oxyethylene) (Poloxamer) H(OCH2CH2)a[OCH(CH3)CH2]b(OCH2CH2)aOH (a .gtoreq.2; b .gtoreq.15; total proportion of hydrophilic polyethylene units is 20-90 wt.% of the copolymer having a mol. wt. of 1000-16,000); (2) 0.01-5 wt.% carboxyvinyl polymer (Carbomer) of mol. wt. 1 x 106-4 x 106; (3) sufficient pharmaceutically acceptable base to adjust the pH to 4-8; (4) 20-85 wt.% water; and (5) optional usual auxiliary agents. The liq. formulations may be used for .beta.-lactam antibiotics, antibacterials, chemotherapeutics, antiinflammatories, cosmetics, etc. A liq. thermoreversible formulation of betamethasone-17,21-dipropionate (I) contained I 0.05, Pluronic F127 18.0, Carbopol 934P 0.3, 10%aq. NaOH 5, and demineralized water to 100 wt.%.
AN 1993:567753 CAPLUS
DN 119:167753
TI Thermoreversible gel as a liquid pharmaceutical carrier for a galenic formulation
IN Kramaric, Anton; Resman, Aleksander; Kofler, Bojan; Zmitek, Janko
PA LEK, Tovarna Farmacevtskih in Kemicnih Izdelkov, d.d., Slovenia
SO Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 551626	A1	19930721	EP 1992-121410	19921216	<--
	R: AT, DE, FR, GB, IT, NL					
	JP 05262670	A2	19931012	JP 1992-338663	19921218	<--

PRAI YU 1991-17 19911219

PI EP 551626 A1 **19930721**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 551626	A1	19930721	EP 1992-121410	19921216 <--
R: AT, DE, FR, GB, IT, NL				
JP 05262670	A2	19931012	JP 1992-338663	19921218 <--

IT Anesthetics
(**topical**, thermoreversible gel carrier contg. Poloxamer and Carbomer for)

IT Pharmaceutical dosage forms
(**topical**, thermoreversible gel carrier for, Poloxamer and carbomer in)

IT 50-02-2, Dexamethasone 50-36-2, Cocaine 50-78-2, Acetylsalicylic acid 51-34-3, Scopolamine 51-43-4, Epinephrine 51-55-8, Atropine, biological studies 53-86-1, Indomethacin 54-42-2, Idoxuridine **57-27-2**, uses 57-47-6, Physostigmine 58-71-9 59-46-1, Procaine 59-99-4, Neostigmine 69-53-4, Ampicillin 73-78-9, **Lidocaine** hydrochloride 79-57-2, Oxytetracycline 87-33-2, Isosorbide dinitrate 92-13-7, Pilocarpine 94-36-0, Benzoyl peroxide, biological studies 96-88-8, Mepivacaine **137-58-6**, **Lidocaine** 154-21-2, Lincomycin 299-42-3, Ephedrine 378-44-9, Betamethasone 530-43-8, Chloramphenicol palmitate 564-25-0, Doxycycline 1400-61-9, Nystatin 1404-90-6, Vancomycin 2180-92-9, Bupivacaine 2392-39-4, Dexamethasone-21-phosphate disodium salt 5104-49-4, Flurbiprofen 5536-17-4 5593-20-4, Betamethasone-17,21-dipropionate 7553-56-2, Iodine, biological studies 9004-10-8, Insulin, biological studies 9007-12-9, Calcitonin 9039-53-6, Urokinase 11096-26-7, Erythropoietin 15307-79-6, Diclofenac sodium 15686-71-2, Cephalexin 15687-27-1, Ibuprofen 15826-37-6 16051-77-7, Isosorbide mononitrate 18323-44-9, Clindamycin 21829-25-4, Nifedipine 22071-15-4, Ketoprofen 22199-08-2, Silver sulfadiazine 22494-42-4, Diflunisal 22832-87-7, Miconazole nitrate 23593-75-1, Clotrimazole 24169-02-6, Econazole nitrate 24729-96-2, Clindamycin-2-phosphate 26787-78-0, Amoxicillin 26839-76-9 26921-17-5, Timolol maleate 34580-14-8, Ketotifen fumarate 35607-66-0, Cefoxitin 36322-90-4, Piroxicam 38194-50-2, Sulindac 38304-91-5, Minoxidil 39562-70-4, Nitrendipine 41340-25-4, Etodolac 42924-53-8, Nabumetone 51940-44-4, Pipemidic acid 52485-79-7, Buprenorphine 53648-05-8, Ibuproxam 53994-73-3, Cefaclor 54527-84-3, Nicardipine hydrochloride 59277-89-3, Acyclovir 59995-64-1D, Thienamycin, derivs. 60607-34-3, Oxatomide 60731-46-6, Elcatonin 64221-86-9 64485-93-4, Cefotaxime sodium 64544-07-6, Cefuroxime axetil 65141-46-0, Nicorandil 65277-42-1, Ketoconazole 66085-59-4, Nimodipine 68401-82-1, Ceftizoxime sodium 69049-73-6, Nedocromil 70458-96-7, Norfloxacin 72509-76-3, Felodipine 74103-06-3, Ketorolac 74578-69-1, Ceftriaxone disodium 75695-93-1, Isradipine 79307-93-0, Azelastine hydrochloride 79660-72-3, Fleroxacin 82410-32-0, Gancyclovir 82419-36-1, Ofloxacin 85721-33-1, Ciprofloxacin 91524-15-1 93106-60-6, Enrofloxacin 111470-99-6 114394-67-1 139639-23-9, Tissue plasminogen activator 150106-85-7 150106-86-8
RL: BIOL (Biological study)
(dosage forms of, thermoreversible gel carrier contg. Poloxamer and Carbomer for)

L10 ANSWER 9 OF 12 CAPLUS

AB Artificial composite membranes composed of silicone and pHEMA [poly(2-hydroxyethyl methacrylate] were developed as an alternative for skin membranes. The structure of the composite membranes was designed based on a model simulation of drug permeation properties. Composite membrane permeabilities for a wide range of drugs with diverse physicochem. properties were measured and compared with those of excised hairless rat skin. A reasonable correlation was found between the calcd. and obsd. permeability coeffs., and between the obsd. values for the composite and excised skin membranes. It is suggested that human skin permeability of drugs may be predicted by using slightly modified composite membranes.
AN 1992:67060 CAPLUS
DN 116:67060
TI Prediction of skin permeability of drugs. II. Development of composite membrane as a skin alternative
AU Hatanaka, Tomomi; Inuma, Masami; Sugibayashi, Kenji; Morimoto, Yasunori
CS Fac. Pharm. Sci., Josai Univ., Sakado, 350-02, Japan
SO Int. J. Pharm. (**1992**), 79(1), 21-8
CODEN: IJPHDE; ISSN: 0378-5173
DT Journal
LA English
SO Int. J. Pharm. (**1992**), 79(1), 21-8
CODEN: IJPHDE; ISSN: 0378-5173
IT Pharmaceutical dosage forms
(**topical**, drug permeation through composite membrane as alternative for human skin in relation to)
IT 50-28-2, .beta.-Estradiol, properties 51-21-8, 5-Fluorouracil 51-30-9,
Isoproterenol hydrochloride 52-26-6, **Morphine** hydrochloride 52-31-3, Cyclobarbital 53-86-1, Indomethacin 58-15-1, Aminopyrine 59-92-7, Levodopa, properties 60-80-0, Antipyrine 62-31-7, Dopamine hydrochloride 87-33-2, Isosorbide dinitrate **137-58-6**, **Lidocaine** 5104-49-4, Flurbiprofen 15307-79-6, Diclofenac sodium 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 65141-46-0, Nicorandil
RL: PRP (Properties)
(permeation of, through composite membrane, as alternative for human skin)

L10 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
AB To measure the contribution of lipid and pore (aq.) pathways to the total skin permeation of drugs, and to establish a predictive method for the steady state permeation rate of drugs, the relationship between permeability through excised hairless rat skin and some physicochem. properties of several drugs were compared with those through polydimethyl siloxane (silicone) and poly(2-hydroxyethyl methacrylate) (pHEMA) membranes, as typical soln.-diffusion and porous membranes, resp. A linear relation was found between the permeability coeffs. of drugs for the silicone membrane and their octanol/water partition coeffs. For the pHEMA membrane, the permeability coeffs. were almost const. independent of
the partition coeff. On the other hand, the skin permeation properties were classified into 2 types: one involves the case of lipophilic drugs, where the permeability coeff. is correlated to the partition coeff., similar to the silicone membrane; and the other involves hydrophilic drugs, where the permeability coeffs. were almost const., similar to pHEMA
membrane. The stratum corneum, the main barrier in skin, could be described as a membrane having 2 parallel permeation pathways: lipid and pore pathways. An equation for predicting the steady state permeation

rate of drugs was derived based on this skin permeation model.
AN 1991:128931 CAPLUS
DN 114:128931
TI Prediction of skin permeability of drugs. I. Comparison with artificial membrane
AU Hatanaka, Tomomi; Inuma, Masami; Sugibayashi, Kenji; Morimoto, Yasunori
CS Fac. Pharm. Sci., Josai Univ., Sakado, 350-02, Japan
SO Chem. Pharm. Bull. (**1990**), 38(12), 3452-9
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
SO Chem. Pharm. Bull. (**1990**), 38(12), 3452-9
CODEN: CPBTAL; ISSN: 0009-2363
IT Pharmaceutical dosage forms
(**topical**, skin permeability of drugs prediction by membrane models in relation to)
IT 50-28-2, .beta.-Estradiol, biological studies 51-21-8, 5-Fluorouracil 51-61-6, biological studies 52-31-3, Cyclobarbital 53-86-1, Indomethacin **57-27-2**, biological studies 58-15-1, Aminopyrine 59-92-7, biological studies 60-80-0, Antipyrine 87-33-2, Isosorbide dinitrate **137-58-6**, **Lidocaine** 359-83-1 5104-49-4, Flurbiprofen 7683-59-2 15307-86-5 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 65141-46-0, Nicorandil 72522-13-5
RL: PRP (Properties)
(skin permeability of, membrane models for prediction of)

L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
AB Following the **topical** application of **morphine** (I) [**57-27-2**] (0.086-8.6 mM), naloxone (II) [465-65-6] (0.1-1.0 mM), or their combination to desheathed saphenous nerves in rats, both drugs impaired nerve conduction of single C-fibers in a concn.-dependent but reversible fashion. I at 0.86 mM increased the latencies of action potential by 10%; when II (0.33 mM) was added to I-treated prepns. nerve conduction was decreased by an addnl. 8%, when compared to that obsd. in untreated prepns. I and II alter the conduction of peripheral nerves by a mechanism similar to that obsd. with local anesthetics such as **lidocaine**. A nonopiate action mechanism is postulated. The clin. application of I or II for reversible peripheral nerve blockade is not recommended since the high doses required for this effect induce the well-known opiate side effects.
AN 1986:102377 CAPLUS
DN 104:102377
TI Local anesthetic effects of **morphine** and naloxone
AU Gilly, H.; Kramer, R.; Zahorovsky, Ingrid
CS Exp. Abt. Klin. Anaesth. Allg. Invensivmed., Univ. Wien, Vienna, A-1090, Austria
SO Anaesthesist (**1985**), 34(11), 619-26
CODEN: ANATAE; ISSN: 0003-2417
DT Journal
LA German
TI Local anesthetic effects of **morphine** and naloxone
SO Anaesthesist (**1985**), 34(11), 619-26
CODEN: ANATAE; ISSN: 0003-2417
AB Following the **topical** application of **morphine** (I) [**57-27-2**] (0.086-8.6 mM), naloxone (II) [465-65-6] (0.1-1.0 mM), or their combination to desheathed saphenous nerves in rats, both drugs impaired nerve conduction of single C-fibers in a concn.-dependent but reversible fashion. I at 0.86 mM increased the latencies of action potential by 10%; when II (0.33 mM) was added to I-treated prepns. nerve

conduction was decreased by an addnl. 8%, when compared to that obsd. in untreated prepns. I and II alter the conduction of peripheral nerves by a
mechanism similar to that obsd. with local anesthetics such as **lidocaine**. A nonopiate action mechanism is postulated. The clin. application of I or II for reversible peripheral nerve blockade is not recommended since the high doses required for this effect induce the well-known opiate side effects.

ST **morphine** naloxone local anesthesia; nerve blockade
morphine naloxone

IT Neurotransmission
(blockade of, by **morphine** and naloxone, local anesthetic activity in relation to)

IT Anesthesia
(local, from **morphine** and naloxone)

IT **57-27-2**, biological studies 465-65-6
RL: BIOL (Biological study)
(nerve transmission blockade by, local anesthetic activity in relation to)

L10 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

AB Improved sepn. of methaqualone (I) [72-44-6], **lidocaine** [**137-58-6**], cocaine [50-36-2], phencyclidine [77-10-1], phenacetin [62-44-2] and methadone [76-99-3] was achieved by a double development technique using CH_2Cl_2:Me Et ketone:NH_3 (90:10:1.5 and 30:70:2). Improved identification of spots for some basic drugs was achieved after the traditional detection spray sequence with successive **topical** applications of: Marquis reagent, Mandelin reagent and a special NH_4 molybdate fuming H_2SO_4 reagent.

AN 1982:609762 CAPLUS

DN 97:209762

TI Improved detection and identification of basic drugs extracted from tissue
using TLC

AU Galante, Lorenzo; Bonventre, Joseph; Salvione, Henry; Bastos, Milton L.

CS Inst. Forensic Med., New York, NY, USA

SO J. Anal. Toxicol. (**1982**), 6(5), 262-3
CODEN: JATOD3; ISSN: 0146-4760

DT Journal

LA English

SO J. Anal. Toxicol. (**1982**), 6(5), 262-3
CODEN: JATOD3; ISSN: 0146-4760

AB Improved sepn. of methaqualone (I) [72-44-6], **lidocaine** [**137-58-6**], cocaine [50-36-2], phencyclidine [77-10-1], phenacetin [62-44-2] and methadone [76-99-3] was achieved by a double development technique using CH_2Cl_2:Me Et ketone:NH_3 (90:10:1.5 and 30:70:2). Improved identification of spots for some basic drugs was achieved after the traditional detection spray sequence with successive **topical** applications of: Marquis reagent, Mandelin reagent and a special NH_4 molybdate fuming H_2SO_4 reagent.

IT 50-36-2 50-47-5 50-48-6 50-53-3, analysis 57-24-9 **57-27-2**, analysis 58-25-3 62-44-2 72-44-6 76-57-3 76-99-3 77-10-1 91-80-5 130-95-0 **137-58-6** 359-83-1 439-14-5 469-62-5 1668-19-5 17617-23-1
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in liver by TLC, forensic)

=>